Amendments to the Specification

Please replace the fourth full paragraph on page 3, with the following:

In certain embodiments, the targeting moiety comprises a homing peptide. Preferably, the homing peptide selectively directs the progenitor cell to the target tissue. An exemplary homing peptide selectively directs the progenitor cell to the target tissue. An exemplary homing peptide comprises a sequence selected from PWERSL (SEQ ID NO:1), FMLRDR (SEQ ID NO:2), and SGLRQR (SEQ ID NO:3), and can target to bone marrow tissues. Another exemplary homing peptide comprises a sequence of ASSLNIA (SEQ ID NO:4), and can target to muscle tissues. Yet another homing peptide comprises a sequence of YSGKWGW (SEQ ID NO:5), and can target to intestine tissues. Still another homing peptide comprises a sequence selected from CGFELETC (SEQ ID NO:6), and CGFECVRQCPERC (SEQ ID NO:7), and can target to lung tissues.

Please replace the first full paragraph on page 8, with the following:

In certain embodiments the targeting moiety comprises a homing peptide. Preferably, the homing peptide selectively directs the progenitor cell to the target tissue. An exemplary homing peptide comprises a sequence selected from PWERSL (SEQ ID NO:1), FMLRDR (SEQ ID NO:2), and SGLRQR (SEQ ID NO:3), and can target to bone marrow tissues. Another exemplary homing peptide comprises a sequence of ASSLNIA (SEQ ID NO:4), and can target to muscle tissues. Yet another homing peptide comprises a sequence of YSGKWGW (SEQ ID NO:5), and can target to intestine tissues. Still another homing peptide comprises a sequence selected from CGFELETC (SEQ ID NO:6), and CGFECVRQCPERC (SEQ ID NO:7), and can target to lung tissues.

Please replace the first full paragraph on page 23, with the following:

(b) Homing Peptides

In certain embodiments, a targeting moiety of the present invention may comprise a homing peptide which selectively direct a progenitor cell to a target tissue. For example, delivering a progenitor cell to the lung can be mediated by a homing peptide comprising an amino acid sequence of CGFELETC (SEQ ID NO:6) of CGFECVRQCPERC (SEQ ID NO:7). Further exemplary homing peptide sequences and their target tissues are listed in Table I.

Please replace Table I on page 23, with the following:

Table I. Exemplary homing peptide sequences and their target tissues.

Target Tissues	Homing Peptide Sequences
Bone Marrow	PWERSL (SEQ ID NO:1) FMLRDR (SEQ ID NO:2) SGLRQR (SEQ ID NO:3)
Lung	CGFELETC (SEQ ID NO:6) CGFECVRQCPERC (SEQ ID NO:7)
Muscle	ASSLNIA (SEQ ID NO:4)
Intestine	YSGKWGW (SEQ ID NO:5)

Please replace the second full paragraph on page 21with the following:

The immunogens used to prepare targeting moieties having a desired specificity will generally be the target molecule, or a fragment or derivative thereof. Such immunogens may be isolated from a source where they are naturally occurring or may be synthesized using methods known in the art. For example, peptide chains may be synthesized by 1-ethyl-3-[dimethylaminopropyl] carbodiimide (EDC)-catalyzed condensation of amine and carboxyl groups. In certain embodiments, the immunogen may be linked to a carrier bead or protein. For example, the carrier may be a functionalized bead such as SASRIN polymeric super acid sensitive resin (see U.S. Patent No. 4,831,084; US Pat. 4,914,15, which are incorporated herein by reference), commercially available from Bachem, King of Prussia, Pennsylvania or a protein such as keyhole limper hemocyanin (KLH) or bovine serum albumin (BSA). The immunogen may be attached directly to the carrier or may be associated with the carrier via a linker, such as a non-immunogenic synthetic linker (for example, a polyethylene glycol (PEG) residue, amino caproic acid or derivatives thereof) or a random, or semi-random poly-peptide.

Please replace the last paragraph starting on page 37 and continuing onto page 38 with the following:

In other embodiments, hydrogels can also be included in the biocompatible scaffold. For example, the hydrogel can be incorporated within and/or around the scaffold prior to implantation to facilitate the transfer of cells and other biological material (*e.g.,* growth factors) from the surrounding tissue into the scaffold. Hydrogels include positively charged, negatively charged, and neutral hydrogels, can be either saturated or unsaturated. Examples of hydrogels are TETRONICS and POLOXAMINES, which are poly(oxyethylene)-poly(oxyproplylene) block copolymers of ethylene diamine; polysaccharides, chitosan, poly(vinyl amines), poly (vinyl pyridine), poly(vinyl imidazole), polyethylenimine, poly-L-lysine, growth factor binding or cell adhesion molecule binding derivatives, derivatized versions of the above (*e.g.*, polyanions, polycations, peptides, polysaccharides, lipids, nucleic acids or blends, block-copolymers or combinations of the above or copolymers of the corresponding monomers); agarose, methylcellulose, hydroxyproylmethylcellulose, xyloglucan, acetan, carrageenan, xanthangum/locust beangum, gelatin, collagen (particularly Type 1), poloxamers (*e.g.,* PLURONICS), POLY(N-isopropylacrylmide), and N-isopropylacrylamide copolymers.

Please replace the first full paragraph on page 41 including the paragraph heading with the following:

VYBRANT staining of cells

One day prior to coating the cells with PPG, the cells were incubated in 10μM VYBRANT (Molecular Probes, Eugene, OR) in Hank's balanced salt solution for 15 minutes at 37° C in 5% CO_2 /95% air after which they were washed once with Hank's balanced salt solution and fresh medium was added. This vital staining of cells is based on the passive diffusion of a colorless, nonfluorescent carboxyfluorescein diacetate succinimidyl ester (CFDA SE) into cells. Once in the cell, the CFDA SE is cleaved by intracellular esterases to yield a highly fluorescent dye which is retained in some cells for a number of weeks. Staining of the cells was verified by fluorescent microscopy after trypsinization of the cells and before the PPG coating procedure.